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ABSTRACT

This booklet focuses upon ways in which a teacher can increase the amount of time students apply themselves to learning. Methods are presented for observing how much time students actually spend learning, for identifying which students are off-task, and for selecting teaching methods to increase students' learning time. Contents include information on: (1) current research on time on task; (2) what is engaged time; (3) observation categories; (4) finding observers; (5) setting an observation schedule; (6) preparing the observer; (7) directions for observers; (8) evaluating observation results; (9) how to improve engaged time rates; and (10) effective classroom practices. Appendixes include definitions of observation categories and forms for rewarding student engagement information, plan for observations, and activity occurrence rates. (JD)

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How To Increase Learning Time

A Tool for Teachers

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Brief Definitions of Observation Categories
Student Engagement Observation Form
Plan for Observations Form
Acitivity Occurrence Rates Form

Preface

This booklet was written to help teachers manage classroom time more effectively. It describes a method for determining how much class time students actually spend engaged in learning. It offers suggestions for reducing nonlearning behaviors.

These materials are not intended for use in teacher evaluation. The categories and procedures suggested here will provide only rough estimates of student behavior. They ignore the overall quality of instruction, which is equally important to student learning. They give no criteria for judging appropriate quantities of learning time—these will vary with student, school and teacher characteristics.

You are the best judge of how and when to apply these procedures in your situation. Don't hesitate to modify the materials to better fit your own students and your teaching style. As you consider these techniques, remember:

- The research these materials are based on was conducted mainly at the elementary school level.
- These methods relate to the acquisition of basic skills (math and reading). They may or may not generalize to other content areas.
- The numbers you derive from coding student behavior will not be precise. They are subject to error and interpretation. But they will show trends and help you pick out behavior patterns for your class and for individual students.
- This book focuses on time. But quality of instruction is an equally important factor in how well students learn.

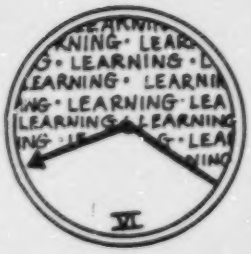
Introduction

Does any teacher expect to find a magic formula that will raise student achievement?

Certainly we'd all like that kind of golden key to learning. But no single approach will help every student gain and retain knowledge.

Even so, a few proven methods exist. Research has shown that you can improve student performance if, for example, you:

- Increase the time a student spends actively learning and practicing a skill
- Have students work at tasks that provide them with a high rate of success
- Involve students in learning activities that require them to interact with others—such as reading aloud or drill and practice
- Tailor instructional strategies and materials to students' achievement levels.
- Provide frequent feedback to students.



This booklet focuses on the first item above. It describes ways you can increase the amount of time students in your class apply themselves to learning. The more you can keep students actively learning, the more achievement you can expect. But how do you do it?

The methods in this booklet will help you:

- Observe how much time your students actually spend learning
- Identify which students are off-task (and what they are doing instead)
- Select teaching methods you can use to increase your students' learning time

Current Research

What is the connection between learning time and achievement? Two major findings emerge from recent research:

1. Students' achievement is higher when they spend more time engaged in learning activities (e.g., practicing, listening, reading).

2. The amount of time students spend learning differs dramatically from classroom to classroom.

In one fifth-grade reading class, for example, students were observed to engage in reading activities 120 hours during the year. Students in a comparable classroom spent 298 hours on reading—two and one-half times more than the other students. Achievement test scores reflected this difference.

In fifth-grade classes, time spent on reading varied from an average of 27 minutes a day to an average of 53 minutes a day. Who do you think showed greater achievement?

In one state, second graders are supposed to learn fractions. But a study found second grade classrooms actually spent from 0 to 399 minutes during the year on fractions, depending on their teacher.

The table below shows how four classes spent time on some selected math topics. Teachers varied both in the total time spent on math and in how they divided that time among subskills.

Time on Math*
(Minutes)

	Class			
Topic	1	2	3	4
Computation	1282	1452	2493	2710
Word problems	109	226	416	132
Money	98	9	228	315
Fractions	0	21	63	399
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
Total Math	2530	2687	4736	5127

Figure 1. Engaged time in different classes.

*Fisher, C.W., Filby, N.N., Marliave, R., Cahen, L.S., Dishaw, M.M., Moore, J.E., & Berliner, D.C. Teaching behaviors, academic learning time and student achievement: Final report of Phase III-B, Beginning Teacher Evaluation Study in Beginning Teacher Evaluation Study Technical Report Series (Tech. Rep. V-1). San Francisco, CA: Far West Laboratory, 1978.

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What Is Engaged Time?

Is engaged time the time the school schedules for instruction? The time the teacher devotes?

Or is it the time students actually engage in learning tasks?

Just looking at a schedule won't tell you how much work a class really does—or how any one student has spent the time. A schedule gives the broad, official version of how much time every student spends learning a subject.

If you schedule more time for a subject or devote more time, you can increase the students' opportunity to learn. But scheduling and teaching do not guarantee a student is actually attending to the subject.

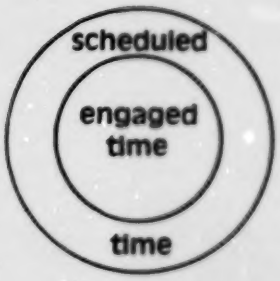


Figure 2.

Engaged time is only part of the time scheduled for a subject.

"Engaged time" is the essence of classroom learning. It is the amount of time students actually work on any assigned activity that builds the desired skill—working on written assignments, for example, or silent reading, or listening to the teacher explain the subject. It can include reading aloud or rapid-fire drill and practice. Engaged time will vary from student to student.

Not all classroom time can be spent learning, of course. Some nonlearning time is needed—taking roll, for example, or moving from one task to the next. And some off-task behavior by students is inevitable. Good teaching doesn't imply that students should be engaged in learning all the time. But research has shown that too much nonengaged time can interfere with learning in many classes.

Think about your own classroom during reading or math time. How much time do your students spend getting ready or straightening up? Do they need to wait for your attention? Do some of them daydream? Do they socialize or watch what others are doing? Do they get restless before the end of the scheduled period?

In one school, the hour before lunch was usually scheduled for reading—but the students took at least ten minutes of the hour getting ready for lunch. In another school, announcements always seemed to interrupt reading classes.

A student can spend hours in class without practicing a skill or listening to instruction because of all the activities that nibble away at engaged time.

Why Observe?

You can reduce nonengaged time and increase the time students spend actively learning. Your first step will be to observe how students actually use class time.

It is impossible for a teacher to observe each child systematically and continuously: Teachers are busy managing lessons, working with individual students or checking papers. To check learning time you will need some help from an observer.

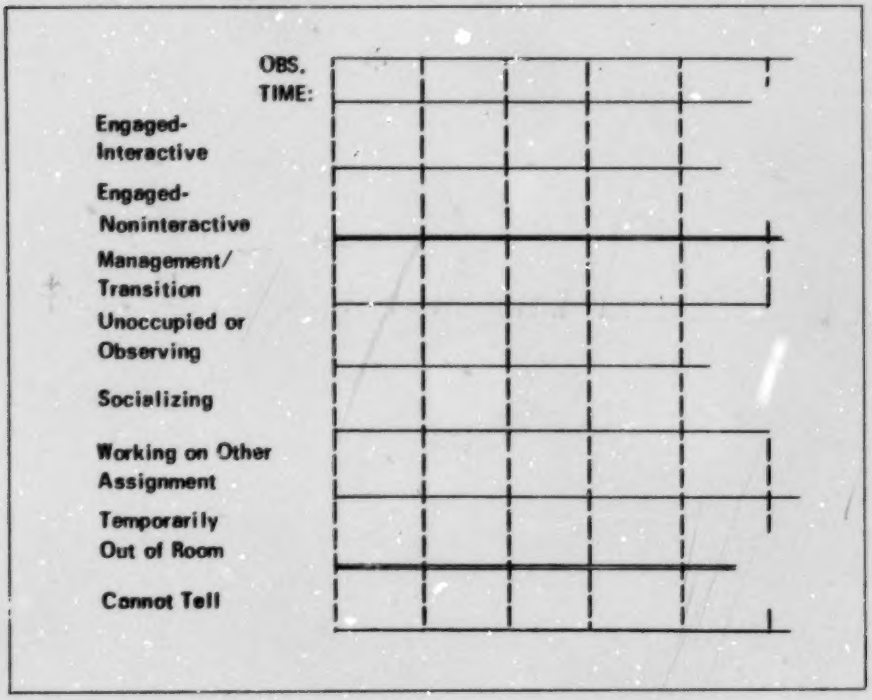
An observer in the classroom can spend all of his or her time watching students, finding a daydreamer, noting children who are waiting for answers to questions, checking time lost in moving from one activity to the next. Every two minutes or so an observer can quickly check what each child is doing and record the information. In essence, the observer takes a series of "snapshots" of your students.

In the following pages, you will find an observation system to help you record your students' behavior. When you know how much time your students actually spend learning, you can decide what you want to do about it.

This observation system assumes an observer who sits in the classroom and watches the students, marking whether they are engaged or nonengaged in learning activities. Over time, the observer develops a profile of the class period. You can use the profile to decide if your students are using time most profitably or if you need to make changes to help them use time better.

Observation Categories

To get a complete picture of engaged and nonengaged behavior, you need a detailed way to describe what is happening. Here are some categories to help you recognize and record the way students spend their time. These categories are used in an observation form (included in the Appendix). Part of the form is shown below.



In this booklet we divide engaged time into two types: interactive and noninteractive.

We divide nonengaged time into management/transition, unoccupied/observing, socializing, working on other assignments and temporarily out of the room.

These categories will fit almost anything you can see in a classroom. But if you have other distinctions that apply to your class, feel free to use them. The form also includes room for comments, if you have any questions or want to explain any coding.

Engaged Time

Engaged time occurs when students work on tasks directly related to the subject they are supposed to be learning.

Engaged time can be interactive or noninteractive. Several studies show that high achieving classes do a lot of engaged interactive work. Classrooms in which students spend most of their engaged time in noninteractive work show poorer results.

Engaged-Interactive

The student is engaged-interactive when working on an instructional task with others (e.g., teacher, aide or other students). The opportunity for feedback or explanation is available as part of the activity. Some examples are:

- Drill and practice
- Discussion
- Listening to a lecture
- Role playing
- Asking questions
- Reading aloud
- Receiving supportive feedback
- Receiving corrective feedback

A student who appears to be listening to a class discussion without contributing verbally is still assumed to be engaged.

Engaged-Noninteractive

The student is engaged-noninteractive when working on an instructional task that is done alone. To get help, the student would have to catch the teacher's attention. Some examples are:

- Silent reading
- Working on written assignments

Nonengaged Time

A student who is doing something that does not directly build skills in the assigned subject is nonengaged. We divide nonengaged behavior into five categories:

1. Management or transition
2. Unoccupied or observing
3. Socializing
4. Working on other assignments
5. Time out of the room

Nonengaged activities are a normal and valuable part of classroom life. But if they take up too much time, they can interfere with learning.

Management/Transition

A student is in management/transition when he or she prepares for a learning task, shifts to a new task, is disciplined, etc. Generally, the student attends to the task at hand, but the task does not lead to increased skill in the subject. (For example, students could wait all day for a teacher to hand out papers and not be better readers.) Management/transition activities include:

- Waiting for an assigned task—for example, right after a room change
- Attending to tasks such as taking roll or distributing papers
- Getting out books or other materials
- Sharpening pencils
- Listening to directions for how to do an activity, i.e., "Fold the paper in half. Write on every other line" (rather than an explanation of subject content)
- Interacting with the teacher for disciplinary reasons
- Waiting for the teacher's help (raised hand or waiting in line)

- Listening to class interruptions, such as schoolwide announcements
- Cleaning up

Sometimes the directions for an activity include an example problem. Students listening to directions which cover subject content are engaged. If they are listening to procedural directions (e.g., how to start a form, hints for working quickly), they are in management/transition.

Unoccupied/Observing

An unoccupied/observing student is mentally out of the room—not working on the assigned task and not interacting with the teacher or with another student. Perhaps the student is:

- Daydreaming
- Looking out the window
- Watching other people socialize without taking part
- Playing with pencils or notebooks
- Looking at comic books (if they are not the reading assignment)

Socializing

The student is socializing when interacting socially with other students, with the teacher or with a visitor. Some examples of socializing with other students are talking, laughing, playing or fighting.

The child is socializing no matter who initiates the activity.

Working on Other Assignments

The student is working on an assignment that does not directly relate to the subject being observed (e.g., reading, math or language arts). When students finish a work assignment early and are allowed to do something else, they are "working on other assignments."

Teachers often assign an activity which does not directly build a basic skill. For example, the teacher may ask a student to draw and color figures that represent spelling words. While this activity can motivate students and may be desirable in small doses, the student is not practicing reading skills. The student could color all day and not become a better reader.

Out of the Room

The student is at school and should be in class, but is temporarily out of the room at the time of the observation.

This category applies to students who:

- Come to class late
- Are dismissed early
- Make trips to the nurse, office or restroom

Cannot Tell

The observer cannot tell what the student is doing. This can happen if the observer's view is blocked or if the student's back is turned.

This code does not fall into either the engaged or the nonengaged categories.

Finding Observers

You may be able to recruit other teachers, parents or older students as volunteer observers. Aides and resource teachers are often willing volunteers. Some teachers have worked out trades: "You observe my class for 20 minutes on Wednesday and I'll observe yours for 20 minutes on Thursday."

Try to choose observers:

- Who understand your classroom teaching style
- Who have the time available to make a series of observations
- Whom you can talk to easily about the observations

You may not find someone who can observe your class for a whole period. Sometimes you may need to recruit more than one observer. You can still piece together a complete observation of your class if you train your volunteers well and schedule them carefully.

Setting An Observation Schedule

Teachers don't necessarily teach a subject at the same time each day. But on the observation days you need to schedule set times to teach a subject—unless an observer is available for the entire day.

Observations are done for one subject at a time, so the first step is to select the subject you wish to have observed (reading, spelling, math, etc.). Make three or four observations of the entire instructional time. If you can't find someone to observe for the entire time in one day, use the Plan for Observations to make sure you observe all parts of the class over several days—and that you observe them about the same number of times. (You can copy the blank forms in the Appendix.)

The beginning and end of the instructional time usually involve less instruction and less engaged time than the middle portion. If one part of your class period is observed more often or less often than the others, you'll get a biased picture of class time.

You need several observations of your class. On one day lessons may go better or worse than expected. Over several days you'll get a good idea of how your "typical" class goes.

Try to schedule representative days (not the day before Christmas vacation or the day of a special assembly).

The next page shows how a completed Plan for Observations might look if you use multiple observers.

PLAN FOR OBSERVATIONS

Teacher Mr. Smith Subject: ✓ Reading Class begins 10:30

Focus of observation: ____ Language Arts Class ends 11:30

✓ Whole class ____ Math

____ Instr. group (specify) _____

____ Indiv. students (specify) _____

Observation Day Date	Observer	Scheduled Observation Time Begin	Scheduled Observation Time End	Actual Observation Time Begin	Actual Observation Time End	No. of Minutes Observed
1. Mon. 9/20	Susan	10:30	11:00	10:30	11:00	30
2. Tues. 9/21	Arthur	11:00	11:30	11:00	11:30	30
3. Wed. 9/22	Arthur	10:30	11:30	11:00	11:30	30
4. Thurs. 9/23	Susan	10:30	11:30	11:00	11:30	30
5. Fri. 9/24	Susan	10:30	11:30	10:30	11:30	60
6. Mon. 9/27	Susan	10:30	11:00	10:30	11:00	30
7.						
8.						

Comments:

Mr. Smith originally scheduled observations for Monday through Friday only. After looking at the actual times observed, Mr. Smith noted that the beginning of his class was underrepresented. He asked Susan to observe the beginning on the 27th.

Preparing the Observer

Training

Observation is easy to learn—but you should give some training and practice to your volunteers. If a number of teachers in your school decide to try observation in their classes, you can set up a training workshop together. The steps below can help observers to understand the process and definitions. Discuss each point with the observer and make sure that you both understand it the same way.

- Give the observer the set of definitions on pages 8-12. Review these observation categories with him/her. Give real examples of student behavior in each category.
- Talk the observer through the Directions for Observers on pages 19-20. These directions describe the overall process.
- Discuss the completed sample Student Engagement Observation Forms on pages 21 and 23.
- Discuss how you want the Student Engagement Observation Form filled out.

Before Each Observation

- Observers must complete a new form each time they observe a new session, a new subject or a new group of children.
- You will have a number of forms after several observations—so be sure each heading is completely filled out.
- Do you want the observer to identify specific students or just use tally marks? If your class is large, tell your observer whether to focus on certain students or to tally the entire class.

- Decide how often to record student behavior—one-minute intervals will work with most classes. (You may wish to start at two-minute intervals until confidence builds.)
- Discuss the lesson for the day. What should the observer expect to see children doing? What materials and activities will you use? Will students be working singly or in large groups?

After Each Observation

Discuss the observation results with the volunteer when your class is over (if you can). Did the observer see problems specific children were having? Did some students remain engaged most of the time? If the completed observation form does not match your perceptions, find out what events or activities the observer saw.

What went well? Did an activity seem particularly interesting to some students? Did things happen that you were unaware of? Were some students totally inattentive? Did the observer classify an activity as "working on other assignments" when you thought it related directly to the subject? This debriefing may suggest ways to change some procedures. It can also help clarify categories before further observations are made.

Directions for Observers

1. Before the Class Begins

a. Get to the classroom before the class begins. Organize your materials. Find a spot where you can see students clearly and yet not distract them.

b. You should have a digital watch, a watch with a second hand or be able to see a wall clock with a second hand.

c. Fill out the top of the Student Engagement Observation Form. Be sure to fill in actual times for the interval schedule labeled observation time, which makes up the top row of the grid. The observation times show when to begin a scan of the classroom.

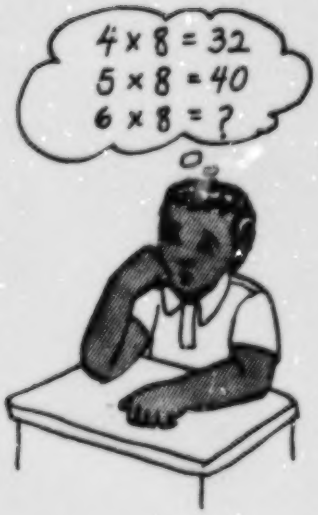
d. Strategies for observing: For a small class set up a code using students' initials, numbers or letters (such as A, B, C, D). Enter these codes in the proper boxes during observations.

For larger classes (more than ten students), you may have to forego the identification code and just use hash marks. Or, you could select about ten students to represent the entire class and code them only. Select the students ahead of time with the teacher.

e. Establish a plan for scanning the room. Scan in the same order every time. For ten or fewer students, take a mental snapshot of the group. For larger numbers, divide the students into groups of four or five and scan the groups in a set order.

2. How to Code Behavior

a. Sometimes it will be obvious what a student is doing. Other times it will not be as clear—for instance, a student looking up could be daydreaming or actively thinking about the work. If you can't immediately tell whether a child is engaged or nonengaged, watch until you can make a judgment. If you are still unclear after about five seconds, code the child "engaged." If your uncertainty continues across several intervals, make a note about the child under "Comments."



b. If you cannot see what the student is doing because your view is blocked or the student's back is completely turned, mark the student in the "cannot tell" box.

c. Make one entry for each student in each interval. Sometimes the student will suddenly change behavior while you are watching. In this case, code only the first behavior.

d. Use the "Comments" section to clarify what the class is doing or to clarify a rating. For example:

- Describe what a student or group is actually doing at any particular interval.
- If a student is socializing, note whether it is with another student, with a group or with the teacher.
- State whether an engaged-interactive activity is a learning exercise, a class discussion or personal help.

e. For each interval, the number of students in class should equal the number who are entered in some activity. If students are late to class or briefly leave the room (for an errand or to go to the restroom) code them as temporarily out of the room and count them in the entry for number of students in class.

3. Finding Totals

a. After the class period, total the amounts in each category by adding across the page and entering the figure in the TOTAL column.

b. In each column, enter the "number of students in class" in the bottom square. Then total across the row in the same way as above. Note: If you "cannot tell" what a student is doing during an interval, do not count that student as present in class for that interval.

c. In each column, enter the "number of students engaged" as the sum of the two "engaged" categories at the top of the page. Total these figures across the page.

d. At the bottom of the page, calculate the engagement rate for the class period.

STUDENT ENGAGEMENT OBSERVATION

Date 9/20 | Grade 4 | Class Period | Begin 10:30 | End 11:30

Subject: Reading ✓ | Teacher or Aide Smith | Observ. Period | 10:30 | 11:00

Language Arts ____ | Observer Susan

Math ____ | Number of Minutes Between

Number of Students 4 | Observations 2

STUDENT ACTIVITY

OBSERVATION

OBS. TIME:	10:30	10:32	:34	:36	:38	:40	:42	:44	:46	:48	:50	:52	:54	:56	:58	11:00	Total
Engaged-Interactive											ABCD	ACD	ACD	ACD	ABCD		17
Engaged-Noninteractive					ABC	ABC	ABCD	BC	ABCD	A							17
Management/ Transition			ABCD	ABCD						BCD						ABCD	15
Unoccupied or Observing	C					D						B	B	B			5
Socializing	AB	ABC						AD									7
Working on Other Assignment																	0
Temporarily Out of Room	D	D															2
Cannot Tell					D												1
Number of Students Engaged	0	0	0	0	3	3	4	2	4	1	4	3	3	3	4	0	34
Number of Students in Class	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	63

Instruction time could be gained by starting more quickly.

Good balance between interactive and noninteractive instruction

Could not tell what Sharon was doing, so she is not counted in totals.

Total Engagement Rate (from Total column) = Number of students engaged / Number of students in class = 34/63 = 54 %

A - Ann
B - Chang-Lee
C - Alex
D - Sharon

COMMENTS: Students were visiting with teacher at beginning of class. Sharon was late.
1st assignment was silent reading. 2nd assignment was board work (quest.-answer)
Sharon had a hard time working individually.
Chang-Lee didn't participate well in group interaction.

25

26

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STUDENT ENGAGEMENT OBSERVATION

Date 10/12 | Grade 6 | Class Period Begin 1:00 End 1:50

Subject: Reading ____ Language Arts ____ Math ✓ | Teacher or Aide Mr. Jackson | Observer Ann K. | Observ. Period 1:00 1:30

Number of Students 25 | Number of Minutes Between Observations 2

STUDENT ACTIVITY

OBSERVATION

OBS. TIME:	1:00	1:02	1:04	1:06	1:08	1:10	1:12	1:14	1:16	1:18	1:20	1:22	1:24	1:26	1:28	1:30	Total
Engaged-Interactive			11					3					1				112
Engaged-Noninteractive											6	4	6	5	2	1	66
Management/ Transition		8							8	8	5						70
Unoccupied or Observing	4	5	2	2	2	2	3	6		3	4	6	5	6	3	5	58
Socializing	8	2	4	1	2	4		6		2		4	3	5	5	3	55
Working on Other Assignment															5	4	14
Temporarily Out of Room	5	3	2	2	1									1	1	1	16
Cannot Tell	3													2	4		9
Number of Students Engaged	0	0	17	20	20	19	22	13	0	0	11	15	17	11	7	6	178
Number of Students in Class	22	25	25	25	25	25	25	25	25	25	25	25	25	23	21	25	391

Total Engagement Rate (from Total column) = Number of students engaged / Number of students in class = 178 / 391 = 46 %

COMMENTS: 1st activity was question/answer on math facts (review)
One student came in almost 10 min. late
2nd activity was working on practice problems... about 5 min. spent on directions and explanation. A few students finished early.

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After the Observation: What Do the Numbers Mean?

In this section we're going to talk about a couple of ways to look at your observation results.

You can expect your observations to reveal typical class patterns and individual student profiles. You will be able to tell:

- The overall engagement rate for your class
- Your balance of interactive and noninteractive instruction
- Which nonengaged behaviors create a problem

In short, you will know whether your class is spending time in a productive way.

Check Observation Times

Your observations should represent typical sessions. Look at the right side of your completed Plan for Observations form. Have you covered the entire class period? Were the days fairly typical, rather than being interrupted by special assemblies or fire drills? If your answer is "no" to either of these questions, you should probably schedule more observations—perhaps as few as one or two—to balance the pattern. For instance, if the first 15 minutes of class are underrepresented, schedule more observations for only that period of time.

Check for Consistent Results

Are your numbers consistent from day to day? To check, you need to compute activity occurrence rates. Gather together all your completed Engagement Observation Forms and fill in the Activity Occurrence Rates worksheet. (See sample, page 29. You will find a blank copy in the Appendix.)

To compute the occurrence rate in each category for each day, look at your Engagement Observation Forms. Divide the total number in the category for that day by the total "number of students in class" for that day. Your answer will be the percent of time, for that day, that the behavior occurs.

Look at the combined engagement rate figures on the left side of the Activity Occurrence Rate form. Do they differ by more than 20 percentage points for any two days? If not, the class is fairly consistent over the days of observation.

If patterns vary from day to day, you will have to interpret your results more cautiously. Go back to the daily observation records to see what events may have caused the inconsistencies. Review your lesson plans for those days. Note any comments.

Check Class Profile

Look at the total picture of students' activities during each individual observation. Look at the Activity Occurrence Rate form to see if there are distinct patterns of activity. Are some off-task behaviors consistently high? Consider questions such as the following:

- How long did it take the class to settle down and start the assignment?
- How much time was spent on class discussion and other group interactive activites?
- How much time was spent on individual seatwork?
- During interactive activities, how many (if any) students were off-task (socializing or unoccupied), and for how long a period of time?
- How many students were off-task during written assignments?

- How efficiently did the class, as a group, move from one activity to the next?
- How long did students spend waiting for help?
- Did students finish their assignments early, without having other classwork to do?
- How long did it take to clean up and get ready for dismissal?

Look at Individual Student Patterns

You may want to gear some changes to your class as a whole. You may also decide to make some changes aimed at individual students.

Look at the Engagement Observation Forms to see which students have problems staying on task. You may decide to analyze every student in class or only students of particular concern. Obtain totals for each of these students the way you do for the whole class—by completing an Activity Occurrence Rate sheet.

Look for students with low engagement rates. Then find out what caused this pattern. The following problems may appear:

Some students receive less interactive instruction. For example, one child gets to work with the teacher a lot. Another child is always doing ditto sheets in the back of the room. Go out of your way to interact with and involve the child who may be less able or willing to demand your time.

Two or three students always finish first. At any rate, they close their books and start doing something else. They may need different instructional materials—that is, harder or easier tasks, or longer assignments. It depends on why they stopped working. You may have to increase motivational activities or give more discipline.

The next section offers some ideas on how to improve your overall class rates.

ACTIVITY OCCURRENCE RATES

Teacher Smith Subject: ✓ Reading _____ Language Arts _____ Math

Class period 10:30 - 11:30

DATE	COMBINED ENGAGEMENT	ENGAGED–INTERACTIVE	ENGAGED–NONINTERACTIVE	TRANSITION	UNOCCUP. OBSERVING	SOC.	WORKING ON OTHER ASSIGNMENT	OUT OF ROOM
9/20	55%	27%	28%	23%	8%	11%	0%	3%
9/21	51	20	31	27	7	13	0	2
9/22	45	10	35	16	18	9	10	2
9/23	54	28	26	23	6	12	0	5
9/24	68	37	31	5	8	5	12	2
9/27	60	32	28	18	12	8	0	2
AVERAGE	56%	26%	30%	19%	10%	10%	4%	3%

This group tends to have a high engagement rate when interactive activities are used (note the difference between 9/22 and 9/24). But Mr. Smith spends over half (54%) of the engaged time on noninteractive activities.

The averages total more than 100% due to rounding off.

How to Improve Your Rates*

Engagement Rate

Different factors affect the engagement rate in every class. Teachers also have different values and goals for student learning.

You will have to choose an engagement rate you find reasonable for your own group. Look at your class size, student age and skills, and the nature of the task. Analyze the observations you make. Then decide on a reachable goal.

One study shows that student engagement rates often average 70-80 percent in small classrooms (fewer than ten children). In larger classes an overall engagement rate of 60 percent may be realistic. Of course, these averages include many classrooms. You should aim at a rate that takes into account your own purposes, your students' characteristics and what you find out from your observations.

Engaged-Interactive Rate

Research shows that student achievement responds strongly to involvement with teachers and other students. If your class engaged-interactive rate is less than half of its total engagement rate, you may want to add more interactive tasks to your teaching. Consider using more discussion and review, reading aloud, drill and practice, praise and corrective feedback. Also consider having students work together. Peer tutoring and answer checking are often effective aids to learning.

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*This information is adapted from materials developed by Research for Better Schools.

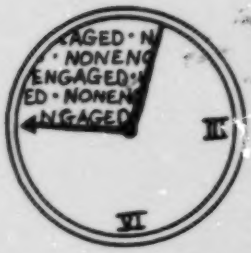
Noninteractive tasks such as silent reading and writing assignments are also important, of course. But classrooms that have only noninteractive activities show lower student gain.

One way to increase interactive learning is to move around the room when students are doing seatwork and check with individual students. Comment and offer help.

Nonengaged Activities

Some of your class' nonengaged activities will be dispensable, others will not. You may find that you want to pry some time loose from the overall nonengaged behaviors. For instance, a management task can often be done more efficiently. You will have to make this judgment yourself.

Look at the Engagement Observation forms. Could you get your class to clean up faster? How long do they wait for help? Could you give clearer instructions? Are you allowing too much time to complete tasks?



Below you will find some ideas on how to reduce nonengaged time.

Management/Transition

You will need some "transition" time in the class. How much depends on how often you change activities each period, whether instruction is individualized or grouped and how much discipline the students require. Again, you are the best judge of how and when to shorten "transition" time.

Do you feel that your class could settle down faster and start assignments sooner? Do they take a long time between activities?

If so, you might explore the following suggestions:

- Develop routines so that students know exactly what to do during transitions. Let students know when new activities are coming up.
- Plan for transitions so that everything is ready and quickly handed out.
- Establish clear rules at the start of the year. Enforce them consistently.
- Make instructions clear and brief.
- Take the lead in starting up—don't wait for things to settle down.
- Arrange the classroom to reduce distractions, interruptions and students moving around. Structure seating and activities so that it is easy to monitor all students.
- Foster good work habits in students, such as keeping a subject notebook, writing down assignments, bringing sharp pencils.

Do students have to wait a long time for help?

- Move around the room to monitor behavior and answer questions as they arise.
- Use monitoring to anticipate student behaviors and head off problems before they occur.
- Check students' progress so that you can anticipate when they will finish, and have the next activity ready.
- Give students alternate or ongoing assignments.

Does discipline take up a lot of time?

There are ways to stop misbehavior quickly and effectively. Prompt and direct action will influence all who receive it—or observe it. Some discipline guidelines include:

- State expectations for students' behavior clearly.
- Reward good behavior as quickly as possible. Try to minimize punishing misbehavior. Give students nonverbal attention, a privilege or a concrete reward for desirable behavior.
- Give students specific feedback about what they should do and what they were doing wrong. You may wish to do this in individual conferences.
- Pace instruction to keep class work challenging.

Socializing

Socializing and unoccupied/observing activities will generally not occur at high rates for the entire class, but they will often contribute to low engagement for particular students.

Some ways to reduce behaviors like talking and fighting are:

- Separate students who distract each other.
- Reduce transition time (see above).
- Make sure students have other tasks to do, if they finish early.
- Monitor and help students so they can understand the task and stay with it.

Unoccupied/Observing

Do students spend a lot of time unoccupied or observing?

Some strategies for reducing this time include:

- For young children, plan lessons that are continuous and well-paced to avoid distractions. Use activities in which each step leads to the next.
- For young children, avoid activities where students depend upon input from other students (or on continual teacher explanation and monitoring, unless working with students one-to-one).
- Move around the room and check each student frequently.
- Reinforce good study skills such as following directions, attending to the teacher and volunteering responses. When a student is off-task, praise an on-task student. (Reminders to get back to work do not seem effective.)

Working on Other Assignments

If students spend very much time working on other assignments, they aren't spending the time as stated in the curriculum.

To reduce this "other" time:

- Pace instruction to better fit the child. Make sure you aren't giving too much time for assignments.
- Examine all activities for their direct relevance to the skill.
- Give back-up work that builds the desired skill.
- Keep aware of students who finish early or stray off-task.

Out of the Room

Some students are temporarily out of the room much of the time. Work with the student and others to control the number and length of their trips to the nurse, office or restroom.

- Set guidelines for when such trips are appropriate.
- You could allow only one student in the restroom at a time. When someone goes out they could flip a card by the door.
- If students take a long time getting to class, work with other teachers to monitor release time.

Beyond Engaged Time

Our main concern in this booklet has been with the quantity of time a class engages in learning tasks. The next step is the quality of the engaged time. This means, among other things, making sure that the materials are suitable for your students and that students are learning efficiently.

Research in the past decade has tried to find effective ways of teaching math and reading skills. This research supports highly structured, teacher-centered classrooms with a warm, friendly atmosphere. Not enough research has been done to prove the value of these approaches in the content areas or for teaching other skills.

Structure

Manage your class in a structured and work-oriented way. Make the instructional decisions yourself, rather than expecting students to completely determine their own activities. Set goals and structure early and stick to them. Have lessons prepared in advance, start class on time, avoid distractions and maintain control.

While teaching basic skills, keep a clear focus in your classroom on academic goals and activities. If the objective is for students to learn math or reading, there is no substitute for activities that build those skills.

Teacher Involvement

Students show higher engagement rates in a supervised situation than an unsupervised one. Therefore, monitor students frequently while they are studying on their own. Be aware of the content they are working on and their success rate. Offer help where needed. Give instruction that includes a high proportion of feedback, practice and comment.

Sometimes it is helpful to have students work in small groups (three to seven) rather than individually. This can make the monitoring job easier, and allow supervision of more students at a time.

Class Atmosphere

Set a warm, supportive atmosphere in the class. Students learn best under conditions that are cooperative, democratic and friendly.

Show personal regard for students by being interested in them, treating them respectfully and avoiding sarcasm. Show that you expect and believe they can learn.

A supportive classroom can be very compatible with an academic, work-oriented focus. Most high-achieving classrooms have both these qualities.

Tailor the Materials

Know your students' skills and potential. Then plan and deliver instruction accordingly.

Check that students understand new concepts before you make assignments. Provide students with materials that are relatively

easy for them—allowing at least 80 percent correct responses. This will allow practice, repetition and overlearning, which have been found to be important for retaining skills.

Eventually students will move on to more difficult material, but only after they have mastered needed subskills. Classes with high engaged time at high levels of success show consistently high achievement.

Ask the Right Questions

Surprisingly, in the elementary grades, factual, single-answer questions seem best to help students learn. These questions provide bit-by-bit successes for children first mastering a skill. Factual questions can ask students for definitions, summaries or inferences. For instance, you can ask children to seek out words that tell a character's feelings in the stories they have read. This requires them to search text and make judgments.

Equal Opportunity

Call on all students equally to insure that all students receive the time, support and instruction they need.

- Pay equal attention to slow, average and quick learners.
- Give slow students enough time to answer.
- Give all students frequent feedback.
- Expect all of your students to learn; require them all to learn as quickly as they can.
- Praise slow students frequently for correct or marginal answers. Give good students constructive criticism as well as praise.

All these suggestions can help make your class a more effective one. In general, if teachers establish a class atmosphere in which students are expected to learn and have enough time to do it, greater progress in reading and math will be the result. Students are found to enjoy these classes as much as or more than classes in which learning is a less obvious goal.

Appendix

OBSERVATION CATEGORIES

Engaged Time

This term applies only to tasks that are directly related to the development of basic skills in reading, math and language arts. These tasks may include seatwork, silent reading and attending to teacher instruction. If a student appears to be listening to a class discussion without contributing verbally, he or she is still engaged. We distinguish the following subcategories of engaged time:

Engaged-Interactive. The student is engaged in an instructional task with others (e.g., teacher, aide or other students). Some examples are:

- Reading aloud
- Drill and practice
- Discussion
- Receiving supportive feedback
- Receiving corrective feedback

Engaged-Noninteractive. The student is engaged in an instructional task that does not involve interaction with someone else. Some examples are:

- Silent reading
- Working on written assignments

Nonengaged Time

This term refers to those instances where a student is involved in doing something other than activity directly related to skill acquisition. It includes socializing, unoccupied time and time out of the room. Also included in this category are activities that are assigned in class but are not directly related to basic skill development in reading, math or language arts. The following subcategories of nonengaged time are specified:

Management/Transition. This includes:

- Times when the class is preparing for work, such as when students are getting out books
- Transition times when there is no assigned task for students, such as right after or right before a room change
- Interactions between student and teacher for disciplinary reasons
- Cleaning up
- Taking roll call
- Distributing papers
- Listening to nonacademic directions
- Waiting for the teacher's help
- Receiving a reprimand for misbehaving

Unoccupied/Observing. Included in this category is the student who is not working on his or her assigned task, interacting with the teacher or interacting with another student. Perhaps the student is:

- Daydreaming
- Looking out the window
- Watching other people socialize without taking part
- Playing with pencils or notebooks
- Looking at comic books (when that is not the reading assignment)

Socializing. The student is interacting socially with other students, with the teacher or with a visitor. Some examples of socializing with other students are talking, laughing, playing or fighting.

Working on Other Assignment. The student is actively working but his or her assignment does not directly relate to the development of the desired basic skills (e.g., reading, math or language arts). When students finish a work assignment early and are allowed to do something else quietly, they are classified in this category. Also included here are those instances where a teacher assigns an activity to students that is not directly related to basic skill development, such as drawing and coloring figures that represent newly learned spelling words. While such an activity is often used to motivate students, it is not considered direct instruction in the subject.

Temporarily Out of Room. The student is present that day, but is out of the room at the time of the observation. Trips to the nurse, office or restroom fall into this category. Students are also counted as out of the room if they have not yet appeared in class, but should be there.

Cannot Tell. The observer cannot see the student well enough to make a classification. This would happen if the observer's view were obstructed or if the student's back were turned and there were not sufficient cues for a judgment.

STUDENT ENGAGEMENT OBSERVATION

Date _____ Grade _____ Begin _____ End _____

Subject: Reading _____ Teacher or Aide _____ Class Period _____ _____

Language Arts _____ Observer _____ Observ. Period _____ _____

Math _____ Number of Minutes Between

Number of Students _____ Observations _____

STUDENT ACTIVITY

OBSERVATION

OBS. TIME:																	Total
Engaged-Interactive																	
Engaged-Noninteractive																	
Management/ Transition																	
Unoccupied or Observing																	
Socializing																	
Working on Other Assignment																	
Temporarily Out of Room																	
Cannot Tell																	
Number of Students Engaged																	
Number of Students in Class																	

Total Engagement Rate (from Total column) = $\frac{\text{Number of students engaged}}{\text{Number of students in class}}$ = _____ = _____ %

COMMENTS:

PLAN FOR OBSERVATIONS

Teacher _____ Subject: _____ Reading Class begins _____

Focus of observation: _____ Language Arts Class ends _____

_____ Whole class _____ Math

_____ Instr. group (specify) _____

_____ Indiv. students (specify) _____

	Observation Day Date	Observer	Scheduled Observation Time Begin	End	Actual Observation Time Begin	End	No. of Minutes Observed
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							

Comments:

ACTIVITY OCCURRENCE RATES

Teacher _____ Subject: _____ Reading _____ Language Arts _____ Math

Class period _____

DATE	COMBINED ENGAGEMENT	ENGAGED–INTERACTIVE	ENGAGED–NONINTERACTIVE	TRANSITION	UNOCCUP. OBSERVING	SOC.	WORKING ON OTHER ASSIGNMENT	OUT OF ROOM
AVERAGE								